NORTH DAKOTA DEPARTMENT of HEALTH

Tularemia

What is tularemia?

Tularemia, a disease that can affect both animals and humans, is caused by a bacterium, *Francisella tularemsis*. Although many wild animals are infected, (hares, rabbits, muskrats, beavers), some domestic animals like sheep and cats can be infected too. The rabbit is most often involved in disease outbreaks. The bacteria also can be found in ticks and deer flies.

Who is at risk for tularemia?
Hunters, trappers or other people who spend a great deal of time out-of-doors are at a greater risk of exposure to tularemia than people with other occupational or recreational interests.

What are the symptoms of tularemia?
Symptoms of tularemia may include sudden fever, chills, headaches, diarrhea, muscle aches, joint pain, dry cough and progressive weakness.

People also can catch pneumonia, develop chest pain and bloody sputum, and can have trouble breathing and even sometimes stop breathing.

Other symptoms of tularemia depend on how a person was exposed to the tularemia bacteria. These symptoms may include ulcers on the skin or mouth, swollen and painful lymph glands, swollen and painful eyes and a sore throat.

How soon do symptoms appear?

Symptoms generally appear between two and 20 days after exposure, but usually within three to five days.

How is tularemia spread?

People can be infected in many different ways. The common ways include contamination of the skin or mucous membranes with blood or tissue while handling, dressing or skinning infected animals; being bitten by infected deer flies or ticks; or handling or eating insufficiently cooked rabbit or hare meat. Less common means of spread are drinking contaminated water; inhaling dust from contaminated soil; or handling contaminated pelts or paws of animals. Rabbit meat can remain infective even after being frozen for several years.

Tularemia cannot be spread from one person to another.

When and for how long is a person able to spread the disease?

Tularemia cannot be spread from person to person.

How is a person diagnosed?

There are laboratory blood tests that can be used to diagnose tularemia. Consult a health-care professional for more information.

What is the treatment?

Tularemia may be treated and cured with certain antibiotics. Make sure to follow all directions when taking antibiotics.

Does past infection make a person immune?

People usually will have long-term immunity after recovering from tularemia; however, re-infection has been reported.

Should children or others be excluded from day care, school, work or other activities if they have tularemia?

No. Infants, toddlers and school-age children should not be excluded unless the staff determines the child is unwilling or unable to participate in activities. They also should be excluded if the staff determines that they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group.

All others can attend work and other functions as long as they are well enough to do so. As always, good hand washing and respiratory etiquette is recommended.

What can be done to prevent the spread of Tularemia disease?

Rubber gloves should be worn when skinning or handing animals, especially rabbits. Wild rabbit and rodent meat should be cooked thoroughly before eating. Avoid bites of flies and ticks by using insect repellent containing DEET on your skin, or treat clothing with repellent containing permethrin. Avoid drinking, bathing, swimming or working in untreated water where infection may prevail among wild animals. Note any change in the behavior of your pets (especially rodents, rabbits and hares) or livestock, and consult a veterinarian if they develop unusual symptoms.

Additional Information:

Additional information is available by calling the North Dakota Department of Health at 800.472.2180.

This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health.

Resources:
American Academy of Pediatrics. [Tularemia]. In: Pickering LK, ed. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003:[666-667]

Control of Communicable Disease Manual, 18th Edition-2004, Heymann, David, MD ed.

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☎ **Report Immediately: 800.472.2180 or 701.328.2378**
Possible Bioterrorism Agents (CDC classified A, B or C Agent)